Overview of Loans and Financial Terms

Most people have trouble understanding loans, and many probably feel bad about it. There is no reason to feel this way, there are a multitude of options and ways to structure a loan, so we can safely say that there is no such thing as a standard loan.

Differences in payment periods and methods, interest computation, interest base, and amortization can get confusing.

Remember the rule of loans: The higher the risk the higher the interest rate. You might think that this rule applies to investments only, and I would say that you are correct, the thing to remember is that to the recipient of the money it is a loan, for the financial institution making the loan it is an investment.

Let's start by looking at some definitions of financial terms some we hear all the time, and some are not used as frequently:

- Instrument: Loan or deposit.
- APR: Annual percentage rate. This is how all loans and interest-bearing deposits state what the number is to calculate the interest. It is always expressed as an annual number. An APR of 7.5% does not mean that the interest is 7.5% every day, the actual daily rate is calculated based on the interest base.
- Fixed Rate: The interest rate is fixed for the life of the instrument, it never changes.
- Variable Rate: The interest rate is can be adjusted up or down depending on the contract and what the interest rates are doing currently.
- Basis Point: A term that we hear all the time when the Federal Reserve Bank changes the Fed Funds Rate (This is the rate that the Federal Reserve Bank charges the banks). One basis point is 1/100 of a percent.
- Capitalize: Not all interest can be capitalized, this is particularly true for loans, albeit not all. What this means is that the interest is billed and is never added back to the principal owed (for loans) to compute the next month's interest.
- Amortization: The gradual reduction of the principal amount owed through monthly payments.

Next we need to look at the three main types of loans that exist: Personal, Real Estate, and Commercial. Personal loans are, as the name implies, loans made to individuals, Real Estate are loans made to buy land or a building or house, and commercial loans are typical for commercial entities and the amounts can be larger and interest and bases can be different.

PERSONAL LOANS

These are the loans that you and I get when we need to buy something that we don't have the cash to pay for or perhaps it is better for us to finance than to decapitalize ourselves.

All personal loans are on an actual-day basis, so interest is calculated on the actual number of days in the month and/or year.

Most personal loans are simple interest, although credit card and automobile loans can accrue interest differently. Simple interest is computed every month on the outstanding

balance and is never capitalized, that is, added to the principal. Every payment made on a single interest loan first pays the interest accrued, and whatever is left is applied to the principal.

Some automobile loans are calculated using the Rule of 78's method. In the United States this method has been illegal for loans longer than 61 months since 1992, and 17 states have outlawed it completely: Arizona, Delaware, Idaho, Iowa, Kansas, Michigan, Minnesota, Nebraska, Nevada, New Hampshire, New York, Maine, Maryland, Massachusetts, Oregon, South Dakota, and Vermont. This method calculates the total amount of interest up front and divides it by the number of months that the loan is for. The net effect is that even if you pay off the loan early you will still pay all of the interest. The key word to listen for is "rebate" if it is mentioned in the loan documentation then it is a rule of 78's loan and you should probably walk away from it if possible.

Some credit card loans are set so that the interest can be capitalized if not paid or the payment is late, thus becoming part of the principal you owe.

REAL ESTATE LOANS

These loans will always be simple interest since the term of the loan is greater than 61 months (5 years plus 1 month), interest is calculated every month and is never added to the principal. Paying the loan off early will save you money in interest that you did not have to pay.

Real Estate loans can have fixed or variable interest rate.

If the word rebate appears anywhere in the loan contract read it carefully. More than likely it is talking about rebates on the points paid upfront, or the amounts that are added to the monthly payment that are used to pay for insurance and taxes.

COMMERCIAL LOANS

These loans can be as varied as the people making them and receiving the loans, although most tend to be simple interest there are some differences that we need to be aware of: Fixed or Variable interest rate (could be limited or not), interest base (the number of days in the month and year used to calculate the interest), and whether the interest can be capitalized if unpaid.

Fixed rate loans have the same interest rate throughout the life of the loan, regardless of whether interest rates are rising or falling.

Variable rates can be adjusted up or down according to the terms of the loan, so you may start paying an APR of 3.5%, but the terms of the loan state that after 24 months the APR will be 5.5%. There are loans that adjust the rate according what is being done to the Fed Funds Rate, but these are rare and usually so large that the loan is participated, that is, more than one bank or financial institution are funding the total amount of the loan.

To understand the interest base we need to understand that the loans interest rate is always expressed as an annual number, and to calculate the interest due for a payment you first divide the APR by the number of days in the year, and then multiply the result by the number of days in the billing period. Based on this, the interest base could be one of the

three combinations below, the examples are calculated using: Outstanding balance: 10,000.00, APR: 7.5%

- Actual/Actual. The interest is computed based on the number of days in a month and of a year.
  Example Regular year: .075 / 365 = 0.000205 x 10,000 = 2.072755
  31-day billing = 64.255405
  30-day billing = 62.18265
  28-day billing = 58.03714
- 360/Actual. The interest is computed on the actual number of days in the billing period but using a fixed number of days in the year.
  Example: .075 / 360 = 0.00020833 x 10,000 = 2.08333
  31-day billing = 64.5823
  30-day billing = 62.499
  28-day billing = 58.3324
- 360/30. The interest is computed using 30-day months and 360 days in a year.
  Example: .075 / 360 = 0.00020833 x 10,000 = 2.08333
  Monthly interest = 62.499